# TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION Division of Water Resources

Memphis Environmental Field Office, 8383 Wolf Lake Drive, Bartlett, TN 38133 1-888-891-8332 (TDEC)

## **Compliance Inspection for State Operating Permits**

Facility Name: Dowdy Pork	Tracking Number: SOPCD-0017
Permit Effective Date:	Permit Expiration Date:
<b>Date of Inspection</b> : June 1, 2015	Inspector(s) Name: Steve Owens &
<b>Time of Inspection</b> : 10:45 a.m.	Crystal Warren

Official Contact Person Name: Doug Dowdy	
<b>Address:</b> 26605 HWY 64	<b>Phone Number:</b> (901) 413-1570
Whiteville, TN 38075	Email: utcottonmom@aol.com

### **Summary of Findings and Comments:**

#### I. Permit

On Monday, June 1, 2015, Crystal Warren and Steve Owens with the Division of Water Resources conducted a Compliance Evaluation Inspection (CEI) at the Dowdy Pork Concentrated Animal Feeding Operation (CAFO) located in Somerville, Tennessee. The CAFO houses approximately 1,800 sows, 200 gilts, 2000-3000 piglets and 6-8 boars. Ms. Warren and Mr. Owens met with owner Mr. Doug Dowdy, and reviewed the operation's records and discussed the self-monitoring program. Afterwards, Mr. Dowdy, Ms. Warren and Mr. Owens inspected the mortality compost facility and primary manure containment structure. The following is a summary of the findings and observations.

The *State Operating Permit* (SOP) for the Dowdy Pork CAFO with tracking number SOPCD-0017 has not been issued because the TN Department of Agriculture (TDA) has yet to receive a site-specific nutrient management plan that meets the minimum requirements for approval. The current nutrient management plan should be amended to include the information requested in a letter dated July 29, 2014, from Dr. Sam Marshall (TDA). A copy of that letter is enclosed with this correspondence.

#### II. Records/Reports

Mr. Dowdy stated that the site records and reports for the CAFO are maintained as required by the State Operating Permit, but were not on-site during the inspection. He stated his son-in-law had the records and was working on a way to better organize and digitize them. The following is a list of records that were not available on-site during the inspection.

- Records of measureable rainfall events:
- Weekly inspections of all stormwater diversion devices, runoff diversion structures and devices channeling contaminated stormwater to the wastewater and manure storage and containment structure(s);

- Weekly inspections of manure containment structures;
- Weekly inspections of the water level in the manure containment structures;
- Daily inspections of the water lines, including drinking and cooling water;
- Log of any deficiencies that have been corrected;
- Expected and actual crop yield in each field;
- Dates manure was applied to each field;
- Weather conditions at the time of application and 24-hours prior and following application;
- Calibration records for land application equipment;
- Date(s) of manure application equipment inspection and calibration;
- Annual manure analysis for nitrogen and phosphorus; and
- Results from most recent soil sampling.

Mr. Dowdy stated that he had not kept records of corrected deficiencies that are discovered during the daily or weekly inspections, but does perform regular maintenance on water lines as soon as malfunctions are discovered. An approved nutrient management plan was not on-site because the TDA had not approved the current version. Mr. Dowdy stated that he inspects the equipment used to disperse the manure to adjacent fields on a daily basis when the equipment is in use. Annual reports from 2010 and 2012-2014 have been received by this office and were signed by Mr. Dowdy.

## **III. Facility Site Review**

The primary manure containment structure for the Dowdy Pork CAFO consists of a single cell lagoon located west of the barns. According to the nutrient management plan, this lagoon has a volume of approximately 632,145 ft<sup>3</sup>. A second pond located south of the CAFO across Old Jackson Road is also utilized as a secondary containment structure. The primary lagoon appeared to be at full capacity and the waste depth marker was not visible. Mr. Dowdy stated that the primary lagoon was full because he had been waiting for the intermittent precipitation events to end before beginning land application. Mortalities are managed through the use of a five bay composting facility. The compost is land applied as fertilizer.

## IV. Effluent/Receiving Waters

The Dowdy Pork CAFO utilizes two mechanisms to distribute manure to adjacent crop land. One mechanism is by a traveling gun and the other is though K-Line irrigation. Mr. Dowdy stated that a neighbor with approximately 80 ac. northwest of the CAFO is now irrigating their fields with manure produced at the CAFO. Mr. Dowdy stated that he maintains a 40 ft. buffer zone between the irrigation fields and Catron Creek. Since Catron Creek has been assessed as being impaired for E. Coli bacteria and phosphorus any additional buffer between the manure application areas and the Catron Creek would be beneficial.

#### V. Flow Measurement

Mr. Dowdy stated that the irrigation equipment is calibrated annually. Recent calibration records were not available on-site during the inspection.

#### VI. Self-Monitoring Program

Samples for the annual manure analysis are collected from the spray nozzle of the traveling gun. Mr. Dowdy stated this is done to collect a more representative sample of what is actually being applied to the crop fields.

## VII. Compliance Schedule

The Dowdy Pork CAFO was not under a Compliance Schedule. However, the facility has operated without a permit since August 6, 2009. Several nutrient management plans have been submitted to the TDA for approval. The last correspondence addressing the status of the nutrient management plan occurred in a letter dated July 29, 2014, from Dr. Marshall with the TDA. This letter included a list of comments that needed to be address before the nutrient management plan could be approved by the TDA. Once it is approved, the TN Division of Water Resources will issue a permit for the CAFO.

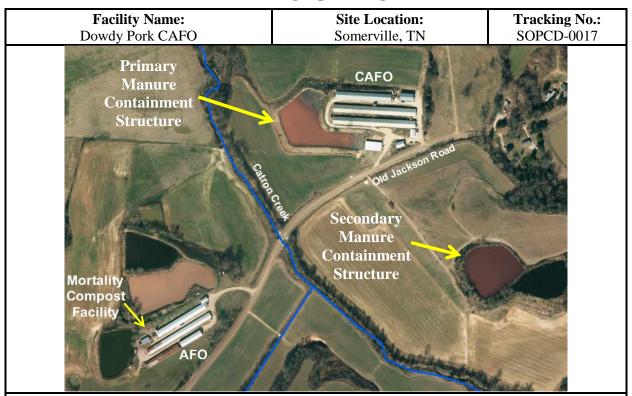
## VIII. Laboratory

Mr. Dowdy stated he utilizes A & L Analytical Laboratories in Memphis to analyze all required manure and soil samples. Mr. Dowdy collects the samples and transports them to A & L for analysis. Chains of custody were not available on-site for review during the inspection. It is recommended that all chains of custody be kept on-site along with other required records.

#### IX. Operation & Maintenance

Mr. Dowdy stated that he had not kept records of corrected deficiencies that are discovered during the daily or weekly inspections, but does perform regular maintenance on water lines as soon as malfunctions are discovered. Manure is applied to adjacent crop fields during the growing seasons.

## **Photographic Log**



**Photo 1.** Aerial photo of the Dowdy Pork CAFO, AFO, mortality compost facility and the primary and secondary manure containment structures.



**Photo 2.** Five bay mortality composting facility located on the farm south of the CAFO. Composted mortalities are used as fertilizer on adjacent crop land.

# **Photographic Log**

Facility Name:Site Location:Tracking No.:Dowdy Pork CAFOSomerville, TNSOPCD-0017



**Photo 3.** View of the primary manure containment structure. There was very little freeboard available for additional waste from the CAFO. The depth storage marker was not visible. Mr. Dowdy stated the marker was underwater.



**Photo 4.** Close-up view of the pumps shown in Photo 3. These pumps are used to either transfer manure to the secondary manure containment structure to the south or to irrigate adjacent crop fields.